Quality Control

DQA: Date:						``DART						
QA Closed:		Date	: :		WORK ORDER NON	-C(UNFO	RMANCE / UI		Work Order u	pdate only	AEROSPACE
Work Orde	ar-		•	Ü	DISPOSITION				AGAINST E	DEPARTMENT	/PROCESS	
			•		Rework		Skid-tube	Crosstube		Water Jet	Engineering	
Part N	No				Scrap			Machining	Small Fab		d. Eng. Coor.	Quality
NCR N	No				Use-as-is Suspected Unapproved	}	Therr	noforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root		$\neg au$		Desc	ription of work order update	П	Initial	Acti	ion	Sign &		1
Cause	Dat	te Step	Qty	1	or non-conformance	1	nief Eng	Descri		Date	Verification	QC Inspector
Design		<u> </u>			· · · · · · · · · · · · · · · · · · ·	T						
Doc/Data												
Equip/Tooling												
Handling/Pre												
Material												
Operator												
Offset/Setup						Ì]	
Process						ļ						
Supplier		İ				1						
Training												
Transport		-										
Jnapproved		1	1									
			<u> </u>	•		FA	ULT CA1	TEGORY		1	<u> </u>	
Landir	ng Gear	_			General							
ĺ	Bendi	ng			Bend		Folio/P	rogram	Г	Outside Dim	ensions	Pressure/Forced
	Centr	e Not Conc	entric		BOM/Route		Grain	_	ŀ	Over/Under	tolerance	Set-up
	Crack	s			Broken/Damage/Defect		Hardwa	re	<u> </u>	Part Incorred	 -	Temperature/Cure
	Crimp	/Kink/Ripp	le/Wave		Burrs		Inspecti	on Incomplete/Un	qualified	Part Lost/Mi		Weld
	Cuffs				Contamination		1	ions Incomplete/U	· -	Part Moved	ĭ F	Wrong Stock Pulled
	Crush	ing			Countersink	\sqcap	4	ned/off center	<u> </u>	Positioned V	∟ Vrong	_
Ì	Heat	-			Cut Too Short		Mislabe		<u> </u>	Power Loss/		Other
	Inspe	ction Strip i	n Tube		Drawing	\vdash	Misread		£_	–		
		/Chatter			Drill Holes		Off-set					
Ì	Turnir	ng Sequenc	e		Finish	Г	1	Calibration				
		/Twist in To			Fit/Function		1	equence				

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

Work Order ID 103429 *103429* Page 2 June-24-13 1:55:29 PM Item ID: D2939-2 Accept *N900040100* Setup Start Revision ID: Stop Item Name: 206 Saddle Start Date: 6/24/13 Start Oty: 6.00 **Cust Item ID:** Required Date: 7/05/13 Req'd Qty: 6.00 **Customer:** Reference: Run Start Tooling: Process Plan: Date: Date: Approvals: Stop Date: _____ SPC (Y/N): Date: Tool # Plan Reject Reject Tool ID Accept Insp. Sequence 1D/ Operation Set Up/ Number Stamp Code Oty Oty Description Run Hours Work Center ID OC8- Inspect parts - second check 0.00 130 ON 13/08/22 *120* QC Memo Quality Control Chemical Conversion Coat per QSI005 4.1 0.00 140 6 NG B82 *140* 0.00 HandFinish Memo Hand Finishing White Gloss(Ref:4.3.5.1) per QS1005 4.3-Alum 0.00 150 X/M-/13/2/26 *150* Powdercoat Memo OVEN TEMPERATURE: START TIME: **Powder Coating** FINISH TIME:

m126125

DQA: Date:					- · · · · · · · · · · · · · · · · · · ·									
QA Closed:		Date:			WORK ORDER NON-	-C(ONFO	RMANCE / UPDATE	14	ork Order up	ndate only		AEROSPACE	
qr crosco.		Date.	-											
Work Orde	er:				DISPOSITION			AGAINS ⁻	T DE	PARTMENT	/PROCESS			
	<u></u>				Rework			Skid-tube Crosstube	•		Water Jet		Engineering	
Part 1	No.				Scrap			Machining Small Fal	<u> </u>	Pro	d. Eng. Coor.	\neg	Quality	
					Use-as-is		Thern	noforming Finishing	B	Rec/Sto	re/Packaging	\Box	Other	
NCR I	No				Suspected Unapproved			Large Fab Composite			Supplier			
		1	1	Doss	vinting of words and a condition	Ι,	- (A) - I	0-4:		Cinn 0		—		
Root Cause	Date	Ston	0+4	Desci	ription of work order update or non-conformance	ı	Initial lief Eng	Action		Sign &	Vosification		OC Inspector	
Design	Date	Step	Qty		or non-comormance	Cil	iiei cug	Description		Date	Verification	' →	QC Inspector	
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Equip/Tooling		}			•									
Handling/Pre	H									1		-		
Material														
Operator			İ									-		
Offset/Setup							* 4.					-		
Process			İ		•									
Supplier														
Training		İ										-		
Transport												1		
Unapproved														
	<u> </u>					FA	ULT CAT	regory						
Landi	ng Gear			_	General		•		_	-	_	_		
	Bending				Bend		Folio/P	'rogram	L	Outside Dim	ensions	ا ا	Pressure/Forced	
	Centre N	ot Concer	ntric		BOM/Route		Grain		\perp	Over/Under	tolerance		Set-up	
	Cracks			<u> </u>	Broken/Damage/Defect	_	Hardwa			Part Incorred	ŀ	_	Temperature/Cure	
		nk/Ripple	/Wave		Burrs	L	1	ion Incomplete/Unqualified	\perp	Part Lost/Mi	ssing		Weld	
	Cuffs			 	Contamination	<u> </u>	4	ions Incomplete/Unclear		Part Moved	Į		Wrong Stock Pulled	
	Crushing			<u> </u>	Countersink	<u> </u>	1	ned/off center		Positioned V				
	Heat Trea			\vdash	Cut Too Short	-	Mislabe			Power Loss/:	Surge [<u> </u>	Other	
1	Inspectio	•	Tube	<u> </u>	Drawing	⊢-	Misread	d .					<u> </u>	
	Marks/Ch			 	Drill Holes	L	Off-set	• 10			· <u>-</u>		·	
	Turning S			 -	Finish	\vdash	ł	Calibration						
	Wave/Tv	vist in Tub)е		Fit/Function		Out of S	Sequence						

Work Order ID June-24-13 1:55:29 PM			*10.3	429*					Page 3	
tem ID: D2939-2 Revision ID: tem Name: 206 Sado Start Date: 6/24/13 Required Date: 7/05/13		*6* *6*		*N900 Cust Item I Customer:	04010 D:	N* s	etup Sta	1 7	S1* S2*	
Approvals: Proces	s Plan:	Date:	Tooling: SPC (Y/N):		ate:	F	tun Sta Sto	IVI	R1* R2*	
Sequence ID/ Work Center ID 160 *160* QC Quality Control	Operation Description QC3- Inspect Part Finis Memo		Set Up/ Run Hours 0.00 0.00	Tool ID	Tool # Plan Code	Accept Qty	Reject Qty	Reject Number	insp.	
170 Packaging Packaging	Memo	HOLK BOOMINING	0.00			_ (QK	<u> </u>		13 8-27	
180 *180* QC Quality Control	QC21- Final Inspection Memo	ı - Work Order Release	0.00				13/	8/27	2	

DQA:			Date:											TAAC
QA Closed:			Date:			WORK ORDER NON	-C	ONFO	RMANCE / UPDATE	۱۸/	ork Order up	ndate only		AEROSPACE
QA Closed.			Date.					Γ -			.			
Work Orde	er:					DISPOSITION			AGAINS	T DE	PARTMENT	/PROCESS		
						Rework			Skid-tube Crosstube	₽Ū		Water Jet[Engineering
Part N	No					Scrap			Machining Small Fat	·□	Pro	d. Eng. Coor.		Quality
						Use-as-is]	Therr	noforming Finishing	-	Rec/Sto	re/Packaging	_[Other
NCR N	Vo		-			Suspected Unapproved	_	1	Large Fab Composite		J	Supplier	ال	
Root		-			Desci	ription of work order update		Initial	Action		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	nief _. Eng	Description		Date	Verification		QC Inspector
Design					_									
Doc/Data														
Equip/Tooling														
Handling/Pre														
Material '	7													
Operator							1							
Offset/Setup	Ш													
Process	Ц													
Supplier	Ш													
Training	Ш												1	
Transport							i							
Unapproved]										
<u>-</u> .							FA	ULT CA	TEGORY					
Landir	ng Ge	ar	-6			General	_	,		_	-	_		
	L B₁	ending				Bend	_	-	Program		Outside Dim	ensions	P	ressure/Forced
		entre No	t Concer	itric	<u> </u>	BOM/Route		Grain			Over/Under	tolerance	_ \$	et-up
		racks				Broken/Damage/Defect		Hardwa	ire	L	Part Incorred	ct [_ T•	emperature/Cure
	L Cı	rimp/Kin	k/Ripple,	/Wave		Burrs		Inspect	ion Incomplete/Unqualified		Part Lost/Mi	ssing	\^	/eld
	C:	uffs 🦨	1000	ı		Contamination	L	Instruct	ions Incomplete/Unclear	L	Part Moved		\v	rong Stock Pulled
	L C	rushing				Countersink		Misalig	gned/off center		Positioned V	Vrong	_	
[Щн	eat Trea	t			Cut Too Short		Mislabe	eled		Power Loss/:	Surge	o	ther
Į	In	spection	Strip in	Tube		Drawing		Misread	t					
[<u></u>	larks/Ch	atter			Drill Holes		Off-set						
	TI	urning Se	equence			Finish		Out of	Calibration					
ĺ	\Box_{w}	/ave/Tw	ist in Tuh	Ф		Fit/Function		Out of	Sequence					

Picklist Print

June-24-13 1:55:28 PM

Page

Work Order ID:

103429

Parent Item:

D2939-2

Parent Item Name:

206 Saddle

Start Date: 6/24/13

Required Date: 7/05/13

Start Qty: 6.00

Required Qty: 6.00

Comments:

IPP: B 00.06.26 New DWG rev (mpp 2069)EC IPP Rev: C As per Rev C 07-03-19 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seg ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-001		Manufactured	No	,	·- ·	100	Each	44.0000	1	6	NI.	12 - 16	
Saddle Billet												17-8-11	
				<u>Location</u>		Loc Oty	<u>La</u>	c Code					
				MAT042		44			<u> </u>				
				9723	39	27				···			
				9845	56	17							
				/C ²	637				6	>			

DQA: Date:					DART										
						WORK ORDER NON	-C(ONFO	RMANCE / L				AEROSPACE		
QA Closed:			Date:				_				Nork Order u	pdate only			
Work Orde	er:					DISPOSITION									
_						Rework	1		Skid-tube	Crosstube		Water Jet	Engineering		
Part N	No.					Scrap			Machining	Small Fab	· Pro	d. Eng. Coor.	Quality		
	· · · ·					Use-as-is	1		noforming	Finishing	- -1	re/Packaging	Other		
NCR I	No.					Suspected Unapproved	1		Large Fab	Composite	-	Supplier	-		
									ν Ш	, .		., _			
Root					Desc	ription of work order update		nitial	Ad	ction	Sign &				
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector		
Design															
Doc/Data	Ш			•											
Equip/Tooling	Ш					•									
Handling/Pre			1]			
Material															
Operator	Ш														
Offset/Setup	Щ											•			
Process	Ш		•												
Supplier						•									
Training			1												
Transport	Щ														
Unapproved				ł					<u> </u>				<u> </u>		
						· · · · · · · · · · · · · · · · · · ·	FAI	ULT CAT	regory						
Landii	ng Gea					General		1		Г	¬- ·		· ¬		
		nding				Bend BOM/S	<u> </u>	•	rogram		Outside Dim		Pressure/Forced		
	\vdash		t Concer	ntric	}-	BOM/Route	-	Grain		-	Over/Under	⊢	Set-up		
	\vdash	acks	1. (0:1-	/\AI	-	Broken/Damage/Defect	⊢	Hardwa		<u> </u>	Part Incorre	<u> </u>	Temperature/Cure		
		-	k/Ripple	wave		Burrs	<u> </u>	•	ion Incomplete/U	· -	Part Lost/M		Weld		
	\vdash	iffs usbine			-	Contamination	_	1	ions Incomplete/	-	Part Moved	<u> </u>	Wrong Stock Pulled		
	—	ushing eat Trea	•			Countersink Cut Too Short	-	1 ~	ned/off center	-	Positioned V		Othor		
	⊢		ι Strip in	Tubo	-	1	-	Mislabe Misread		Ł	Power Loss/	ourge [Other		
		arks/Ch		rube	-	Drawing Drill Holes	\vdash	Off-set	ı						
	—		equence		⊢	Finish	-	1	Calibration				 -		
			ist in Tub			Fit/Function		1	Sequence						
	, r-•						•								

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

DART AEROSPACE LTD	Work Order:	103429
Description: 206 Saddle, Inboard, Right side	Part Number:	D2939-2
Inspection Dwg: D2939 Rev: C DSK: Rev:		Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

				SPECTION	-		•	•		
····		·	X First	Article	Proto	type				
					Record .	Actual Dim	ensions			
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5		
Α	0.100	0.140		0121	121	0120	8110	.121		
В	0.100	0.140		121	.119	a 120	6121	119		
С	0.100	0.140		-118	122	. 122	2510	6123		
D	0.210	0.230		223	,223	. 220	.225	.222		
E	1.245	1.255		1.248	1.248	1.248	1.248	1.248		
F	1.245	1.255		1.248	1.248	1.248	1.248	1-248		
G	2.495	2.505		2.497	2.499	2.497	2.497	2.447		
_H	0.510	0.515		1512	.512	.512	.512	,512		
1	1.572	1.582		1.576	1.577	1.577	1.577	1577		
J	2.495	2.505		2.499	2.499	2.499	2 499	2.498		
_K	0.257	0.262		,259	.259	.259	259	.759		
<u>L</u>	0.312	0.317	_	.314	.3/4	.3/4	6314	.3/4		
M	0.235	0.240		.238	. 238	. 238	.238	, 238		
N	0.100	0.140		0119	119	117	120	117		
0	0.540	0.560		.546	·547	o 548	.548	,548		
Р	0.490	0.510		,499	.497	499	.499	,497		
Q	3.715	3.725		3.717	3.718	3.719	3.719	3.717		
R	2.720	2.760		2.738	2,740	2-740	2.740	2.740		
S	0.240	0.270		256	.257	.256	,257	0256		
Т	0.100	0.180		135	.135	.135	.135	.135		
U	1.625	1.635		1.629	1.629	1.629	1.629	1.628		
<u></u>	1.362	1.372		1.366	1.360	1.366	1.366	1.367		
	0.316	0.321		.31G	316	.316	.316	3/6		
_X	1.250	1.270		1.2576	1.2574	1.2566	1.2583	1.257		
<u>- Y</u>	1.565	1.585		1.572	1.5714	15705	1.573	6571		
Z	0.178	0.198		*188	.188	.188	,188	. 188		
AA										
AB			_ 	<u> </u>						
AC										
AD				<u>.</u>						
		-	Accept/Reject		<u> </u>		<u> </u>	<u> </u>		
	Measure	d by:	4			Date:	13-08-	21		
	Audite	by: A4				Date:	13/08/2	22		
Prototype Approval: 9-8 N/A Date: N/A										
Rev	Date	Change				Rev	ised by	Approved		
Α		New Issue				RF	-			
В	02.12.12	Re-format; Ac DT8695 A/B	lded Dim. X-Y,	DT8683, DT8	3686, DT8690		RF	-		
С	07.03.21		rawing revision	C		KJ/	JLM .			
	D 07.11.23 DT8695 A/B removed KJ/EC/DD									

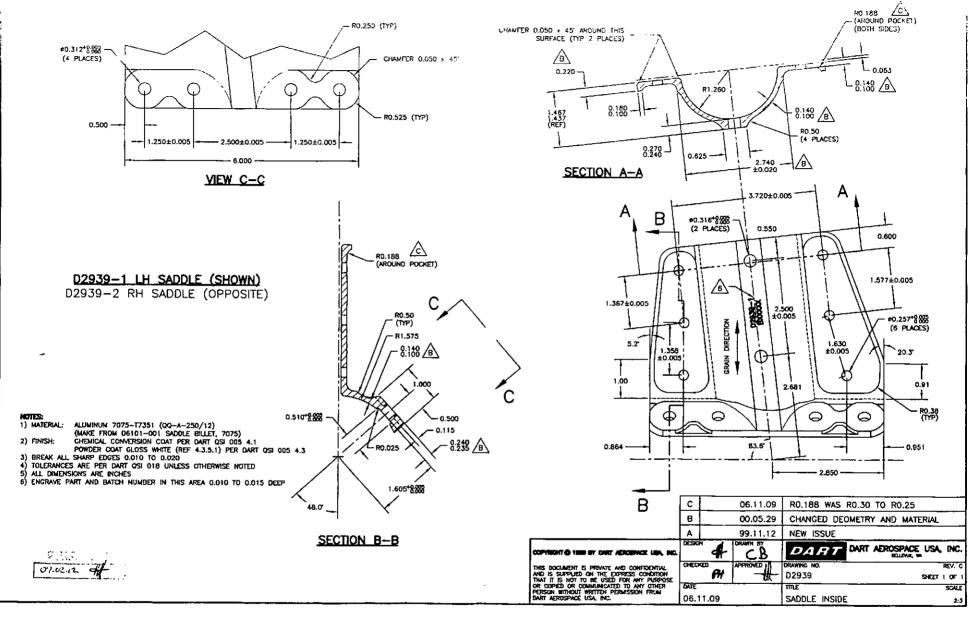
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DART AEROSPACE LTD	Work Order:	103419
Description: 206 Saddle, Inboard, Right side	Part Number:	D2939-2
Inspection Dwg: D2939 Rev: C DSK: Rev:		Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

			X First	_	Proto				
					Record	Actua	l Dime	nsions	
Dim	Min	Max	Go/No Go Gauge	62	\$ 2	3	3	4	5
Α	0.100	0.140		† (121 —		-			
В	0.100	0.140		119		1			
	0.100	0.140		.173					
D	0.210	0.230		.222					
E	1.245	1.255		1.248					
F	1.245	1.255		1.248					
G	2.495	2.505		2.499					
Н	0.510	0.515		.572					
	1.572	1.582		1.577		1			
J	2.495	2.505		2.498	1	-	I		
K	0.257	0.262		259	259				1
- L	0.312	0.317		.314	.259	1	$\overline{}$		1
M	0.235	0.240		238		 		• • • • • • • • • • • • • • • • • • • •	
N	0.100	0.140		e 118		 			-
0	0.540	0.560		.544		† -			-
P	0.490	0.510		1497		-			
-ia	3.715	3.725	<u> </u>	3.719	- -	_			
R	2.720	2.760		7 740			-	·	
S	0.240	0.270		.255		 			
T	0.100	0.180		:135		 			
Ü	1.625	1.635		1 79		 			
$\frac{\sigma}{V}$	1.362	1.372		1.366		1			
W	0.316	0.321		316	.316	 			
X	1.250	1.270		1.2567	4 JIW	 		· · · · · · · · · · · · · · · · · · ·	
- 7	1.565	1.585		1 6307				·	
_ <u>'</u>	0.178	0.198		1.5707	./88	┼─┈			
 ĀA	0.170	0.190	***	100	1/00	-			+
AB			<u>-</u>	ļ		 			
AC AC				 		 			
AD						 			ļ
AD			Accept/Reject			<u> </u>			
	Measure	d by:	<i></i>				Date:	13-08-	21
	Audite	d by:					Date:	13/08/	22
Proto	type Appr	oval:		1/A			Date:		N/A
Rev	Date	Change						ised by	Approved
A		New Issue					RF		
В	02.12.12	Re-format; Ad DT8695 A/B	dded Dim. X-Y,	DT8683, DT8	686, DT869	0 &	KJ/F	RF	
С	07.03.21		rawing revision	С			KJ/J	LM	
D	07.11.23	DT8695 A/B r						C/DD 🗚	<i>X</i>

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